CONTENTS VOL. 108, 1989

Research papers

Estimation of soil hydraulic properties and their uncertainty from particle size distribution data
S. Mishra, J.C. Parker and N. Singhal (Blacksburg, Va., U.S.A.) 1
Effects of parameter uncertainty on predictions of unsaturated flow
S. Mishra and J.C. Parker (Blacksburg, Va., U.S.A.) 19
River–groundwater relationships in the lower parts of The Netherlands
G.J. Heij (Bilthoven, The Netherlands) 35
Evaluation of rainfall–discharge models with discrimination
M.H. Khan (Mymensingh, Bangladesh) 63
Hydrogeology and hydrochemistry of Cretaceous aquifers, Southern High Plains, U.S.A.
R. Nativ (Rehovot, Israel) and G.N. Gutierrez (Austin, Tex., U.S.A.) 79
A method for conserving core-storage and computing time in aquifer simulation models
A.J. Beasley (Bexhill-on-Sea, Sussex, Great Britain) 111
Hydrochemical evolution of regional groundwaters to playa brines in central Australia
J. Jankowski and G. Jacobson (Canberra, A.C.T., Australia) 123
Infiltration, soil moisture, and related measurements at a landfill with a fractured cover, Illinois
C.J. Booth and B.C. Price (DeKalb, Ill., U.S.A.) 175
Evaluation of hydrological and biological influences on CO_2 fluxes from a karst stream
K.J. Hoffer-French (West Chester, Pa., U.S.A.) and J.S. Herman (Charlottesville, Va., U.S.A.) 189
Seepage through a hazardous-waste trench cover
R.W. Healy (Denver, Colo., U.S.A.) 213
Hydrodynamic dispersion in karstified limestones and dolomites in the Upper Jurassic of the Franconian Alb (F.R.G.)
K.-P. Seiler (Neuherberg, F.R.G.), P. Maloszewski (Neuherberg, F.R.G. and Cracow, Poland) and H. Behrens (Neuherberg, F.R.G.) 235
Using historical data in nonparametric flood estimation
W.E. Bardsley (Hamilton, New Zealand) 249
A geostatistical tool for drought management
S. Rouhani and K.A. Cargile (Atlanta, Ga., U.S.A.) 257
Application of a digital filter for modelling river suspended sediment concentrations
L. Zhang, D.J. Gregor and J.-P. Vernet (Versoix, Switzerland) 267
Determining runoff routing model parameters without rainfall data
M.J. Boyd and M.C. Bufill (Wollongong, N.S.W., Australia) 281
A Monte Carlo comparison of parametric and nonparametric estimation of flood frequencies
K. Adamowski (Ottawa, Ont., Canada) 295
Paleohydrology affecting recharge to overexploited semiconfined aquifers in the Mehsana area, Gujarat State, India
E. Bradley (Steep Falls, Maine, U.S.A.) and P.N. Phadtare (Ahmedabad, India) 309
Water chemistry and isotope study of streams and springs in northern Chile
M. Magaritz (Rehovot, Israel), R. Aravena (Waterloo, Ont., Canada), H. Peña, O. Suzuki and A. Grilli (Santiago, Chile) 323
New statistical grain-size method for evaluating the hydraulic conductivity of sandy aquifers
K.O. Uma (Nsukka, Nigeria), B.C.E. Egboka (Awka, Nigeria) and K.M. Onuoha (Nsukka, Nigeria) 343

Sedimentary petrology – A guide to paleohydrogeologic analyses, example of sandstones from northwest Gulf of Mexico
J.M. Sharp, Jr. and E.F. McBride (Austin, Tex., U.S.A.) 367
Variations in concentrations of aqueous aluminium and other chemical species during hydrological episodes at Birkenes, southernmost Norway
H.M. Seip (Oslo, Norway), D.O. Anderson (Kristiansand, Norway), N. Christophersen (Oslo, Norway), T.J. Sullivan (Corvallis, Oreg., U.S.A.) and R.D. Vogt (Nesøya, Norway) 387

Announcements 407

Erratum 410